REMARKS/ARGUMENTS

This amendment is a response to the Office Action mailed on July 9, 2003. Claims 1 and 2 are pending in the application and stand rejected. Applicants have amended Claims 1 and 2, amended several parts of the specification of the application, and respectfully request reconsideration of the above-referenced application.

Objections to the Specification

The title of the invention has been objected to for not being descriptive. A new title is required, mentioning a controlled modulus and internal friction. Applicants have submitted herewith amendments to the title of the above-referenced application and respectfully request that the Examiner reconsider the objections thereto.

The Abstract of the disclosure is objected to because standard idiomatic English should be used. Applicants have herein submitted a revised Abstract to comply with that objection and respectfully request withdrawal of the same.

The disclosure is objected to because of the following informalities:

1). At the first line of the specification, after the title, it should be indicated that this case is a national stage application of PCT/JP00/05282, filed August 4, 2000; and

2). At page 11, line 5, "1 × 10-3" should apparently be "1×10^{-3}."

Applicants have herein submitted amendments to the specification to correct these informalities and respectfully request withdrawal of the objections to the specification.

Claim Objections

The Examiner notes that the wording of Claim 2, line 2, "such as a mouthpiece for wind instruments and the like," does not further limit the claim from a resonator pipe.

Applicants respectfully submit that the presently amended Claim 2 has overcome this objection and kindly request the Examiner its withdrawal.

Rejection Under 37 U.S.C. §112, first paragraph

Claims 1 and 2 are rejected under 37 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. The Examiner asserts that the claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner further asserts that:

> "as worded, Claim 1 requires "an internal friction in terms of its natural logarithm of at most 1×10^{-3}" for the produced ceramic product. This corresponds to teaching of page 11, lines 2-5. However, it contradicts the rest of the specification. At page 11, second paragraph, it is indicated that the formed body should have a degree of internal friction of "at least 1×10^{-3}," and preferably "at least 2×10^{-3}." Furthermore, the exemplary formed bodies of the invention (examples 1 and 2), clearly are indicated of having internal friction of 1×10^{-3}. See for example, Figure 5 (examples 1 and 2), Figure 7 (example 2 and Tables 5 and 6 on page 20) as to example 2. As a result of these directly contradictory teachings, one of ordinary skill in the art would not be enabled to make and/or use the invention without performing undue experimentation to determine what internal friction is actually acceptable if forming a working invention. Dependent Claim 2 does not correctly describe the effects of Claim 1." (Office Action, page 3, line 14 – page 4, line 3.)

Applicants respectfully submit that the basis for the rejection of Claims 1 and 2 under 35 U.S.C. §112, first paragraph, is incorrect. Applicants kindly point out to the Examiner that the representation of the internal friction in the above-referenced application is done in terms of the natural logarithm of the inverse of the internal friction, i.e., $\log Q^{-1}$ (see, for example, page 11, lines 3 and 4; Figure 5; Figure 7; and Tables 5 and 6 on page 20). Using such a representation for the internal friction, $\log Q^{-1} = 1 \times 10^{-3}$ corresponds to an internal friction of $Q = 0.9977$, $\log Q^{-1} = 2 \times 10^{-3}$ corresponds to an internal friction of $Q = 0.9954$, and $\log Q^{-1} = 1 \times 10^{-2}$ corresponds to an internal friction of $Q = 0.9772$. As observed in these examples, "1×10^{-3}" represents the highest internal friction even though the magnitude of

log Q^{-1} is the lowest. Such a representation may be helpful, among other reasons, because "raw" internal friction numbers i.e., Q values, are close to each other in magnitude and, by representing them using the logarithmic format, the small differences in internal friction values are amplified as shown in the examples provided hereinabove. The use of the inverse of the internal friction in the logarithmic expression may simply be in order to avoid representing a internal friction by a negative number —an approach that would not make physical sense because the logarithm of a number less than 1 is negative. The language of presently amended Claim 1 has bee slightly changed to make this point clearer. Applicants respectfully submit that, at least in view of these explanations, the rejections of Claims 1 and 2 under 35 U.S.C. §112, first paragraph are not proper and respectfully request their withdrawal.

Conclusion

Based at least on the foregoing reasons and on the Examiner's conclusion that the closest prior art does not teach or suggest a ceramic impregnated musical instrument having controlled modulus of elasticity or internal friction characteristics (Office Action, page 4, item 8), Applicants believe the present application is in condition for allowance and respectfully solicit an early Notice of Allowability.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Gregory J. Maier
Registration No. 25,599
Robert T. Pous
Registration No. 29,099
Attorneys of Record

22850
Tel: (703) 413-3000
Fax: (703) 413 -2220

I:\ATTY\MQM\218131US\AM.DOC